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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,136	03/31/2004	Akinori Shibuya	Q80850	3725

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EXAMINER

GILLIAM, BARBARA LEE

ART UNIT PAPER NUMBER

1752

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,136

Applicant(s)

SHIBUYA, AKINORI

Examiner

Barbara L. Gilliam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed November 14, 2005 has been entered and fully considered.
2. Claims 1-8 are present of which claim 8 is new.

Terminal Disclaimer

3. The terminal disclaimer filed on November 14, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Number 10/838,316 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

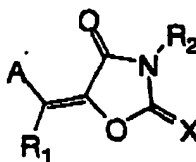
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 4 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Murota et al. (EP 1048982 A1).

- a. Murota teaches a photopolymerizable composition comprising (I) a



sensitizing dye represented by formula (III-1)

, (II) a titanocene

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compound and (III) a compound which reacts with at least either a radical or acid to change and retain at a physical or chemical characteristics. In formula (III-1), A is an aromatic or heterocyclic ring, which may have a substituent; X is O, S or N(R₃); R₁, R₂, R₃ each represents a hydrogen atom or a monovalent non-metallic atomic group ([0018]). Murota teaches that aryl groups are preferred for R₁, R₂ and R₃, including phenyl and naphthyl which can be substituted ([0140]-[0141]). It is the examiner's position that when X is NR₃ and R₃ is the preferred phenyl or naphthyl group, the limitations of claimed formula (2).

b. *The examiner notes that US 6335144 B1 is the US equivalent of the cited reference to Murota. The said reference is also applicable under 35 USC 102(b). However for the sake of brevity, duplicates rejections will not be made herewith.*

Claim Rejections - 35 USC § 103

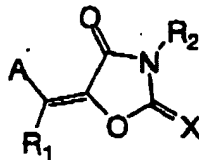
6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murota et al. (EP 1048982 A1).

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- a. Murota teaches a photopolymerizable composition comprising (I) a



sensitizing dye represented by formula (III-1) , (II) a titanocene compound and (III) a compound which reacts with at least either a radical or acid to change and retain at a physical or chemical characteristics. In formula (III-1), A is an aromatic or heterocyclic ring, which may have a substituent; X can be N(R₃); R₁ , R₂, R₃ each represents a hydrogen atom or a monovalent non-metallic atomic group (p. 0018). Murota teaches that aryl groups are preferred for R₁, R₂ and R₃, including phenyl and naphthyl (p. 0140-0141). It is the examiner's position that when X is NR₃ and R₃ is the preferred phenyl or naphthyl group, the limitations of claimed formula (3) are met. Murota et al. teach increasing the sensitivity of the composition by adding cosensitizers such as compounds having a nitrogen-nitrogen bond specifically and preferably hexaarylbiimidazoles ([0185]). Therefore it would have been obvious to one of ordinary skill in the photosensitive art to incorporate a hexaarylbiimidazole* compound into the photosensitive composition taught in Murota et al. to increase sensitivity. *Murota et al. misspelled hexaarylbiimidazoles as "hexaallybiimidazoles".

- b. *The examiner notes that US 6335144 B1 is the US equivalent of the cited reference to Murota. The said reference is also applicable under 35 USC 103(c). However for the sake of brevity, duplicates rejections will not be made herewith.*

Response to Arguments

8. Applicant's arguments filed November 15, 2005 have been fully considered but they are not persuasive.

a. Applicant argued Murota et al. do not disclose or suggest a composition containing a hexaaryl biimidazole or a bisacyl phosphine as recited in present claims 1-3 and 5-8. The Examiner disagrees. As pointed out in the rejection under 35 USC 103(c), Murota et al. clearly teaches the presence of hexaaryl biimidazole as a cosensitizer ([0185]). Applicant further argued that the specific combination recited in claim 1 (the compound of formula (1) and hexaaryl biimidazole or a bisacyl phosphine) yields high sensitizing ability. This assertion is made without any support. "Objective evidence which must be factually supported by an appropriate affidavit or declaration to be of probative value includes evidence of unexpected results, commercial success, solution of a long-felt need, inoperability of the prior art, invention before the date of the reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant." See *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984) & *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972). "The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). Examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration include statements regarding unexpected results, commercial success, solution of a long-felt need, inoperability of the prior art, invention before the date of the reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant." MPEP 716.01(c). Further claims 1-3 and 5-8 are rejected under 35

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USC 102(b) which cannot be overcome by unexpected results. "Evidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C. 102 rejections and thus cannot overcome a rejection so based. *In re Wiggins*, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973)." MPEP 2131.04.

b. Applicant argued that when a substituted aryl group is present, a beneficial result is obtained. Applicant points to page 24, lines 6-10 as support of this assertion. The Examiner acknowledges that R6 is synonymous with R1 (page 29, lines 3-4) however there is nothing to suggest that the beneficial result of having a substituted aryl group for R1 is also obtained when R6 is substituted aryl group. Further the beneficial result is obtained when the sensitizing dye is excited by light and the subject matter of claim 4 is a compound, not a composition or a method using said compound (or composition). Lastly Murota et al. teaches with sufficient specificity that substituted aryl groups are among the preferred groups for R3.

9. The rejections under 35 USC 102(b) of claim 4 over Mousseron (US 3678041 A), Sawdey (US 2739888 A) and Wells (US 4195179 A) are withdrawn in light of the amendment to claim 4.

Allowable Subject Matter

10. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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11. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not fairly teach or suggest the photosensitive composition of claim 8.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. In US 6,846,615, Okamoto teach a method for making a lithographic printing plate wherein the printing plate comprises a similar photopolymerizable composition as a layer coated thereon (abstract; claims).

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

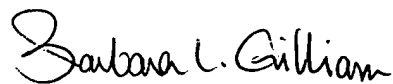
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara L. Gilliam whose telephone number is 571-272-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

b. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Barbara L. Gilliam
Primary Examiner
Art Unit 1752

bg
January 18, 2006